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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,832	09/19/2001	Dennis A. Lonergan	PIL0064/US	1229
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EXAMINER MADSEN, ROBERT A				
ART UNIT		PAPER NUMBER		
1761				

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/955,832

Applicant(s)

LONERGAN ET AL.

Examiner

Robert Madsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The Response filed December 11, 2003 has been entered. Claims 1-22 remain pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4,9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (US 3578772) in view of Yamamoto (EP0404957).
4. Regarding claims 1-4,10,11,13-21,Taylor teaches packaging unproofed dough in a controlled atmosphere package and freezing the dough to provide an atmosphere that prevents dehydration and spoilage and that is suited for proofing either before or after thawing so that the resulting dough may be baked or fried to form a roll, as recited in claim 10, or a pastry as recited in claim 11, such as cruller or doughnut, which non-laminated as recited in claim 13, without significant loss in food value or taste (Column 1, lines 10-39, 45-60, Column 1, line 69 to Column 2, line 2, Column 3, line 50 to Column 4, line 15, Column 4, line 51-57). However Taylor is silent in teaching carbon dioxide enriched atmosphere in order to enhance proofing over a non-carbon dioxide enriched atmosphere, as recited in claim 1, 14, and 18 at levels of 50-90% as recited in claims 2-4,15-17,19-21.

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5. Yamamoto ('957) teaches that fermentation conducted in a carbon dioxide environment provides an improved flavor, volume, and fermentation time (i.e. shorter) over non carbon dioxide enriched environments (e.g. air). Yamamoto teaches utilizing 100% carbon dioxide. (Abstract, Pages 2-3, Page 6).

6. Therefore, it would have been obvious to modify the controlled atmosphere environment of Taylor and include a 100% carbon dioxide environment, as recited in claims 1-4, 13-21 since Taylor teaches proofing is completed in the package either before or after thawing in order to produce a dough product without significant loss in food value or taste and Yamamoto teaches that proofing dough with 100% carbon dioxide atmosphere will provide a better volume and flavor as compared to non-carbon dioxide enriched atmospheres. One would have been substituting one conventional controlled atmosphere for another for the same purpose: proofing dough in a controlled atmosphere to provide a dough product without loss of flavor or value.

7. Regarding claims 9 and 12, Taylor teaches rolls and pastries, but is silent in teaching bread and laminated dough. However, once it was known to freeze/proof a dough product in the package of Taylor, to select any conventional dough product requiring a proofing step would have been an obvious matter of choice.

8. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (US 3578772) in view of Yamamoto (EP0404957) as applied to claims 1-4, 10, 11, 13-21 above, further in view of Lonegran et al. (US 5672369).

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9. Regarding claims 5,7,8, Taylor teaches leavening, but is silent in teaching the particular type of leavening agent such as yeast or a chemical agent such as a mixture of sodium bicarbonate and glucono-delta-lactone. Lonegran et al. are merely relied on as evidence of the conventional pastry dough leavening agents known in the art.

Conventional leavening agents include yeast and/or a chemical agent such as a mixture of sodium bicarbonate and glucono-delta-lactone (Column 4, lines 34-55).

Therefore, to select any particular type of leavening agent would have been an obvious matter of choice since it was known to select yeast and/or a chemical agent such as a mixture of sodium bicarbonate and glucono-delta-lactone for conventional dough products.

10. Regarding claim 6, Taylor teaches either a proofed dough or unproofed dough may be used in the freezer package, and that the product stored in the package may be proofed as needed prior to cooking (Column 3, lines 50-56, Column 1, lines 50-53), but Taylor is silent in teaching preliminary fermentation. However, Lonegran et al. is relied on as evidence of the conventional methods used in preparing a cooked dough product. Lonegran et al. teach depending on the type of dough producing method selected, a preliminary fermentation step may be included (e.g. via a straight dough method), which is followed by a final proofing step prior to cooking (Column 1, lines 10-64). Therefore, to include a dough that has been preliminary fermented would have been an obvious matter of choice, depending on the particular type of dough making method selected since Taylor teaches either proofed or unproofed dough can be placed in the package, freezing the package, and completing the final proofing the dough in the

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package and Lonegran et al. teach some dough making methods include a preliminary fermentation step in addition to and prior to the final proofing step

11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (US 3578772) in view of Yamamoto (EP0404957) and Henika et al. (US 3615680).

12. Taylor teaches packaging unproofed dough in a controlled atmosphere package and freezing the dough to provide an atmosphere that prevents dehydration and spoilage and that is suited for proofing either before or after thawing so that the resulting dough may be baked or fried without significant loss in food value or taste. (Column 1, lines 10-39, 45-60, Column 1, line 69 to Column 2, line 2, Column 3, line 50 to Column 4, line 15, Column 4, line 51-57). Taylor further teaches that during proofing the dough does increase in volume (shown in Figure 5 versus Figure 6, explained in Column 3, lines 58-68) However, Taylor is silent in teaching carbon dioxide enriched atmosphere in order to enhance proofing over a non-carbon dioxide enriched atmosphere, and that the dough expands 100% during the proofing step.

13. With respect to using carbon dioxide, Yamamoto ('957) teaches that fermentation conducted in a carbon dioxide environment provides an improved flavor, volume, and fermentation time (i.e. shorter) over non carbon dioxide enriched environments (e.g. air). Yamamoto teaches utilizing 100% carbon dioxide. (Abstract, Pages 2-3, Page 6). Additionally, Yamamoto teaches that proofing in carbon dioxide significantly increases the volume of the finished product over proofing in air (Figures). Therefore, it would have been obvious to modify the controlled atmosphere environment

of Taylor and include a carbon dioxide environment since Taylor teaches proofing is completed in the package either before or after thawing in order to produce a dough product without significant loss in food value or taste and Yamamoto teaches that proofing dough with a carbon dioxide atmosphere will provide a better volume and flavor as compared to non-carbon dioxide enriched atmospheres. One would have been substituting one conventional controlled atmosphere for another for the same purpose: proofing dough in a controlled atmosphere to provide a dough product without loss of flavor or value.

14. With respect to achieving a 100% volume increase after proofing, Henika et al. teach it is notoriously well known in the dough art to allow a dough to double in volume (i.e. reach 100% volume increase over the unproofed volume) in the final proof step prior to cooking (Column 1, lines 38-48). Therefore it would have been obvious to modify Taylor and allow the dough to rise to 100% the unproofed volume during the final proofing step since Henika et al. teach that this is the conventional proofing step followed in preparing a dough product. One would have been substituting one conventional final proofing step for another for the same purpose.

### ***Response to Arguments***

15. Applicant's arguments with respect rejection of the claims made under 35 U.S.C. 102(b) as being anticipated by Lonegran et al. (US 5672369), Juchem (US 5549922), Yamamoto et al. (EP0404957), and Yamoto (02-027936) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

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However, upon further consideration, a new ground(s) of rejection is made as set forth above.


### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 7:00AM-3:30PM M-F.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Madsen  
Examiner  
Art Unit 1761



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